a) The most suitable software development approach for the railway system would be a structured approach. The reasons for this approach is due to the tasks that the system will required to do. The system must be reliable all the time and capable of handling peak traffic loads. A structured approach will ensure the system is thourghly tested & capable of handling such loads, and reliable enough with minimal error. Detail doccumentation would be required and is provide through this approach.

b) Two key factors to be considered in the technical feasibility of the System is that the Hardware required for the tasks is available and if Programing languages are available for the regular updating & changes. Since the system will be under constant change with different time tambles for diffe possible ticket price increases and track maintenance will require the technology of a language that can easily be modified or created to handle the changes and the tasks required
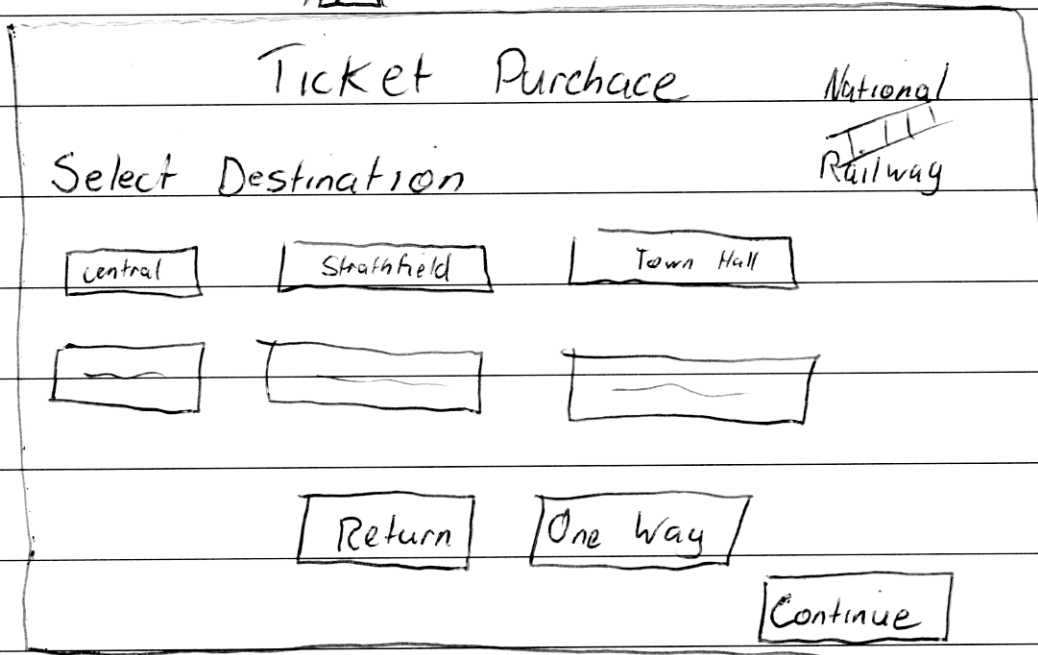
Pto.

02WB4
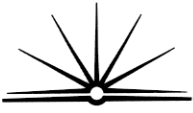
b continued

When asses the technical feasibility the availability of hardware required for the task must be carried out to determine if the solution will have the hardware requirements required to be feasable. Hardware needs to be found to combine cash & credit card vending machines with touch screen displays.

ci)

Ticket Purchace   National
                                   Railway
Select Destination

| central | | Strathfield | | Town Hall |

| | | | | |

| Return | | One Way |

                        | Continue |

~~Purchase~~

Ticket Purchase   National

Select ticket Type then pres + or —   Railway
to increase amount

| Single | | Child |

| + | | - | O | + | | - | O

Amount

Ticke Price $:

| Print Reciept | | Purchase | | Cancel |

ii)   National

Railway

Main Menu

| Purchase Ticket |

| View Time Table |

| View Train Status |

| Plan Your Journey |

02WB4
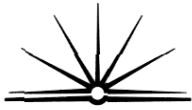
d) One group of travellers who would have a major problem in using touch screens would be visually impared people who couldnot view the screen.

This problem can be resolved by providing Audio instructions to the user given an Audio confirmation on what has been selected and what is about to happen. The setup of even a system dedicated to visualy impared people could have unique feel buttons with Audio ~~highlight~~ highlight the keys by feel.

e) BEGIN TICKET PURCHASE

```
~~Get~~ Get User Dest
    Found Station = False
Index = 0

~~REPEAT~~ REPEAT

~~destination~~ IF destination (index). Station = UserDest THEN

    ~~Mum~~ Price ~~Mum~~ Single = destination (index). full single

    Price ~~Mum~~ Return = destination (index). full return
        Found Station = True
    END ~~IF~~ IF

Index = Index + 1

UNTIL Found Station = True OR Index = 99
```
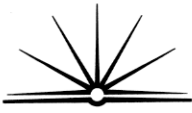
e continued

~~Total Fare~~

Get Num Single

Get Num Return

~~Total Fare = Num Single x Price Single~~

Single Total = 0

Single Total = Num Single x Price Single

Return Total = 0

Return Total = Num Return x Price Return

Total Fare = Single Total + Return Total

Print Total Fare

~~IF Confirmed~~

Conformation = False

IF conformation = True THEN

TRANSACT

END IF

END TICKET PURCHASE